

# Proposal For Applying Quality Management Techniques To Manage Welfare Facilities For The Elderly

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## ABSTRACT

*In recent years, the quality of services at welfare facilities for the elderly has come into question and differences in concepts and ways of approach toward quality are affecting facility performances. In the context of quality management, the concept of quality has extended from a mere focus on service to business processes, and now focuses specifically on quality in welfare facility management. Care workers have typically been responsible for the quality of care in welfare facilities. However, as it has become difficult to retain already-trained care workers and also source fresh, competent care workers to provide care for the elderly in welfare facilities, there is a pressing need to adopt measures to find, train, and retain skilled care workers. We propose a quality management model to effectively manage welfare facilities for the elderly with an emphasis on improving the intellectual productivity of care workers in these facilities. This model is centered mainly on information sharing to secure and develop skilled human resources in order to ensure the delivery of high quality services in these facilities. Moreover, in this model, it is conditional that CS, ES, SS are met under stable management and environment that same quality and optimal services are offered. Further, we report examples of the application of this model and its effectiveness.*

**Keywords:** quality management; welfare facilities for the elderly

## INTRODUCTION

The Japanese population structure is characterized by a rising aging rate that is rapid in comparison to that of the other developed nations. In 2010, senior citizens over the age of 65 constitute 23.1% of Japan's population. To support such an aged society, Japan introduced the Long-Term Care Insurance Act in 2000.

The system has shifted from an arbitrary allocation of welfare resources to a more choice-based approach. This has brought into question the quality of services at welfare facilities for the elderly, where the differences in the concept and approach to quality affect the performances of these facilities. As the revenues earned by most of the welfare facilities are minimal, many enterprises and nonprofit organizations (NPOs) are withdrawing from the nursing care business. The attrition rate of the care industry is 21.6%.

The manufacturing industry developed and implemented quality management techniques for the production of products and services that satisfied customer expectations. However, securing and training skilled personnel to achieve this quality management is difficult.

The Welfare facilities, like the manufacturing organizations, are facing an increased need to improve the quality of their services. In the care industry, it is indispensable to improve quality by implementing quality management. We reported that such activities have really been constantly effective.

However, in the field of welfare, few studies scientifically investigate the effects of the quality improvement of the service or provide real-life examples and case studies. Mihara (2000) focused on perceptions by care workers at nursing and residential homes for the aged. Segawa (2001) studied families that are taking care of older people, looking at the family structure according to the system-theory approach. Yamamoto (2003) intended to make, into paper patients, what kind of knowledge was used in judgment of a nurse who applied nursing practice methodology.

Against this background, a questionnaire consisting of six questions that allowed for open-ended (descriptive) answers was sent out nationwide. The responses were analyzed using a text mining approach. On the basis of the results of the analysis, we propose a quality management model to manage welfare facilities for the elderly.

The model was implemented at a nursing home for the elderly in Saitama in order to verify its effectiveness.

### **NURSING HOME'S MANAGEMENT TECHNOLOGY PROBLEM**

In order to identify issues regarding quality management in the nursing homes selected for the study, a questionnaire consisting of six open-ended questions was sent out nationwide and the responses were analyzed using a text mining approach.

The questionnaires were sent out to 4,261 nursing homes nationwide and 451 responses were received (recovery rate of 10.6%). An analysis of the descriptive answers for each question revealed that many nursing homes list "human resources" as their most pressing issue and recognize the importance of improving the working conditions and career management programs in order to train and retain staff.

On the basis of these findings, we propose two models - "The Flow of Business Processes at Welfare Facilities for the Elderly" and "A Quality Management Model of Welfare Facilities."

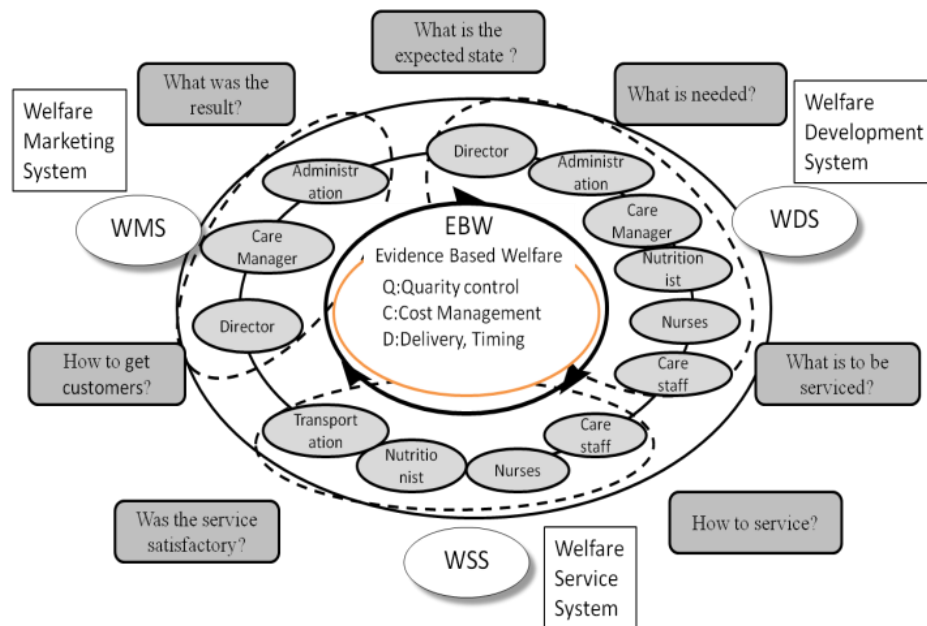
In the future, it is needed to demonstrate how the activities based on the two models would meet the goals of developing and retaining staff at these welfare facilities. Moreover, regarding career management, a system responsive to the experience and skill level of the staff should be developed.

### **SIGNIFICANCE OF QUALITY MANAGEMENT IN WELFARE FACILITIES FOR THE ELDERLY**

The mission of welfare facilities for the elderly is to provide customers (consumers) with services that delight them, and fulfilling this mission is the key to the sustainability of an organization. In the new century that calls for developing services on the basis of global marketing management, it is increasingly necessary to develop services that enhance customer value taking into account an understanding of their life stage and style.

To realize this goal, we believe that it is important to implement a way of thinking that combines quality management with the laws of nature in which images of the customer's voice (implicit knowledge) are correctly conceptualized (developed into a language) and converted into (turned into explicit knowledge of) engineering language (drawings).

For this purpose, it is important to develop a new methodology that will enable us to create a strategic service model that will anticipate customer requirements and supply those services at the appropriate time, and also assess the effectiveness of the service model (Figure 1).



**Figure 1: The Flow of Business Process of Welfare Facilities for the Elderly**

This model was configured with a hardware system that had three core elements - welfare marketing systems (WMS), welfare development system (WDS), and welfare service system (WSS) - to establish new management technology principles for business planning, service development, and care design and service, among other factors, as can be seen in Figure 1.

We incorporated Evidence Based Welfare (EBW) principles with the software system, which we proposed, in order to corroborate the effects of applying these systems to quality management. The implementation of the model demonstrated an enhanced effectiveness in the divisions of service development, care, service, and others.

### QUALITY MANAGEMENT MODEL OF WELFARE FACILITIES FOR THE ELDERLY

We focused on improving the care services at welfare facilities for the elderly through the implementation of a Quality Management Model, which improves the intellectual productivity of care workers at these facilities (Figure 2). This model is centered mainly on information sharing and securing and developing human resources to ensure high quality services in those facilities. Moreover, in this model, it is conditional that CS (Customer Satisfaction), ES (Employee Satisfaction), SS (Social Satisfaction) are met under stable management and environment that same quality and optimal services are offered and improvement of work environment is realized by 1) improvement in salary, 2) creating motivation at work, 3) well-developed family benefits, 4) cooperation of educational institutions, 5) well-developed training, 6) creating manuals, 7) career programs, and 8) leadership.

### CASE STUDY

We report examples of the application of this model and its effectiveness at a welfare facility for the elderly in Saitama. This case study focuses on the improvements in the work and meeting processes. In particular, we focus on the processes to improve the work environment, which is at the core of the model on information sharing.

There are many studies for ES, information sharing, and quality management in the field of manufacturing. However, in the field of welfare, few studies scientifically investigate the effects of information sharing of the service or provide real-life examples and case studies.

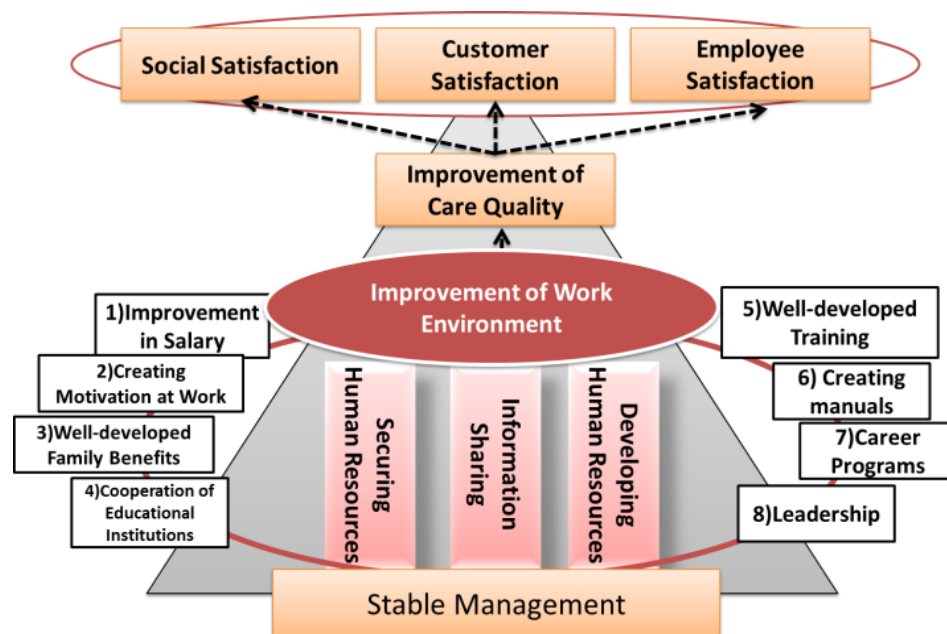


Figure 2: Quality Management Model of Welfare Facilities

### Improvement of the Work Process

Thirty staff members (out of a total of 49) at a special nursing facility for the elderly in Saitama adopted the Relational Diagram approach as a means to improve the work process. With a user capacity rate of 74% and an operational level of 96% (in 2007), the staff noted their on-the-job related problems on the cards designed for this purpose. The 83 cards were then analyzed and the problems were classified into 13 major groups.

Using this technique, the staff could extract the on-the-job problems and share this information, which led to tangible improvements in the work process.

### Improvement of Meeting Process

In the meetings that were held to improve the work process, we focused on a meeting that charted the progress of the meeting from its existing state to an improved, effective mode, and we reported the improvement of the meeting process.

As a result, problem-solving and information sharing were enabled and the staff evaluated the series of processes positively.

### Discussion of Applicability of the Model

In this paper, we examine the applicability of the proposed model of quality management techniques in welfare facilities for the elderly.

Through the activities related to the improvement of the work process, the staff was able to share information. This improved interpersonal relations, which is considered to be a representative factor of occupation stress. Because staffs frequently interact with each other, their work becomes more effective. Moreover, managers can achieve employee satisfaction, which relates to quality management, by creating a supportive and employee-centered work environment.

Moreover, the staff learned how to come up with solutions for problems. For work improvement, it is important to proactively devise solutions. Further, this improves and sustains the quality of service. In addition, the manager can apply this process to a manual for staff education in the future and can strengthen personnel training programs.

Thus as an example of the application of this research, the authors implemented this model among the staff of a welfare facility for the elderly and obtained the above the results.

## **CONCLUSION**

In recent years, though the issue of quality management at welfare facilities for the elderly has been attracting attention for their quality of service, there have been only few reports of welfare facilities recording a significant improvement in their processes following the adoption of quality management techniques.

In this study, we extracted the problem of quality management at welfare facilities for the elderly through a nationwide questionnaire. On the basis of our findings, we proposed two models - “The Flow of Business Process of Welfare Facilities for the Elderly” and “Quality Management Model of Welfare Facilities.”

We reported examples of the application of this model and its effectiveness at a welfare facility for the elderly in Saitama. We demonstrated an improvement of the work and meeting processes. In particular, we focused on the process to improve the work environment, which is the core of the model on information sharing. The model that we introduced in this paper can be applied to other institutions, including not only welfare institutions, but also medical facilities.

A problem to be addressed in the future is determining an index of job evaluation in order to resolve the key requirements of securing and training skilled personnel. The Japanese government has announced action plans for securing and retaining skilled personnel in welfare and care activities. There is also a rising awareness of the difficulty in conducting an independent evaluation of this industry.

As the care needs of Japan’s rapidly aging population increase, measures to improve the quality of facilities for the elderly will become more important. The Japanese government, through various steps, must promote the quality management of welfare facilities and medical services for the elderly.

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